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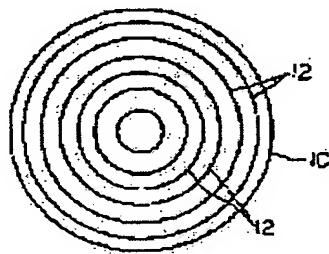
(21)Application number : **03-330936** (71)Applicant : **ALPS ELECTRIC CO LTD**
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(54) MAGNETIC DISK AND PRODUCTION THEREOF

(57)Abstract:

PURPOSE: To assure the stable floating traveling of a magnetic head by forming plural floating control grooves for controlling the floating quantity of the magnetic head on at least either of the front surface and rear surface of the magnetic disk.

CONSTITUTION: The concentrical cylindrical floating control films 12 are formed on the magnetic disk 10. These grooves 12 are formed to the depth larger on the outer peripheral side than on the inner peripheral side of the disk 10. The forming pitch is narrowed more densely on the outer side than the inner side and the groove width is made larger on the outer side. The purpose thereof is to suppress the air flow pressure on the outer peripheral side where the circumferential speed is higher than the inner peripheral side of the disk 10 and the high air flow pressure is generated. The air flow pressure generated on the disk 10 is controlled by forming the grooves 12. The air flow pressure is thus maintained constant over the entire surface of the disk 10. The floating quantity of the magnetic head traveling afloat on the disk 10 is maintained constant by generating the specified air flow pressure.



CLAIMS

[Claim(s)]

[Claim 1] The magnetic disk characterized by carrying out surfacing transit of the magnetic head at the time of a rotation drive, and carrying out two or more formation of the surfacing control slot which controls the flying height of the magnetic head by this magnetic head in the magnetic disk with which informational record playback is performed at least to one side of the front face and rear face of a magnetic disk.

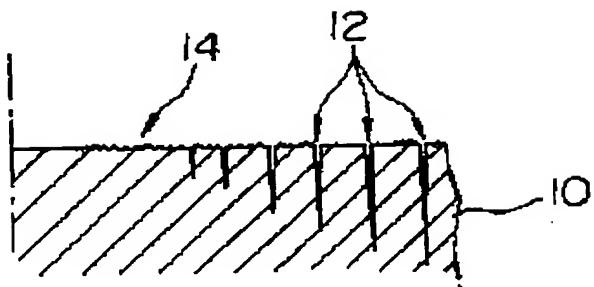
[Claim 2] The magnetic disk characterized by the surfacing control slot formed in the periphery side being deeper than the surfacing control slot formed in the inner circumference side of a magnetic disk in a magnetic disk according to claim 1.

[Claim 3] The magnetic disk characterized by forming the surfacing control slot in a periphery side densely rather than the inner circumference side of a magnetic disk in a magnetic disk according to claim 1 or 2.

[Claim 4] The magnetic disk characterized by the flute width of the surfacing control slot formed in the periphery side being wider than the flute width of the surfacing control slot formed in the inner circumference side of a magnetic disk in a magnetic disk according to claim 1, 2, or 3.

[Claim 5] The manufacture approach of the magnetic disk characterized by carrying out the laminating of the magnetic layer after forming a nickel-P alloy layer and forming a surfacing control slot on a base at this nickel-P alloy layer.

[Claim 6] The manufacture approach of the magnetic disk characterized by using the photolithography method for formation of a surfacing control slot in the manufacture approach of a magnetic disk according to claim 5.



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